

FORM PTO-1390 (Modified)
(REV 10-95)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

194667US2PCT

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

09/622593

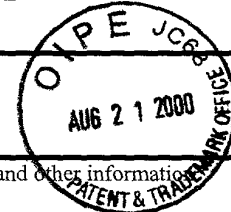
INTERNATIONAL APPLICATION NO.
PCT/SE99/00198INTERNATIONAL FILING DATE
16 February 1999PRIORITY DATE CLAIMED
19 February 1998

TITLE OF INVENTION

PROCEDURE TO TRANSMIT INFORMATION AT TELEPHONE ANSWERING SERVICE

APPLICANT(S) FOR DO/EO/US

Bo OLSSON, et al.



Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ A copy of the International Search Report (PCT/ISA/210).
8. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
9. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
10. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
11. ☒ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

Items 13 to 18 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
A **SECOND** or **SUBSEQUENT** preliminary amendment.
16. ☐ A substitute specification.
17. ☐ A change of power of attorney and/or address letter.
18. ☐ Certificate of Mailing by Express Mail
19. ☒ Other items or information:

Request for Consideration of Documents Cited in International Search Report
Notice of Priority

PCT/IB/308

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR 09/622593		INTERNATIONAL APPLICATION NO. PCT/SE99/00198		ATTORNEY'S DOCKET NUMBER 194667US2PCT	
20. The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :				CALCULATIONS PTO USE ONLY	
<input type="checkbox"/> Search Report has been prepared by the EPO or IPO \$840.00 <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) \$670.00 <input type="checkbox"/> No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) \$760.00 <input checked="" type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$970.00 <input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) \$96.00					
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$970.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492 (e)). <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30				\$130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	7 - 20 =	0	x \$18.00	\$0.00	
Independent claims	1 - 3 =	0	x \$78.00	\$0.00	
Multiple Dependent Claims (check if applicable). <input type="checkbox"/>				\$0.00	
TOTAL OF ABOVE CALCULATIONS =				\$1,100.00	
Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28) (check if applicable). <input type="checkbox"/>				\$0.00	
SUBTOTAL =				\$1,100.00	
Processing fee of \$130.00 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492 (f)). <input type="checkbox"/> 20 <input type="checkbox"/> 30 +				\$0.00	
TOTAL NATIONAL FEE =				\$1,100.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). <input type="checkbox"/>				\$0.00	
TOTAL FEES ENCLOSED =				\$1,100.00	
				Amount to be refunded	\$
				charged	\$

- ☒ A check in the amount of **\$1,100.00** to cover the above fees is enclosed.
- ☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- ☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. **15-0030** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

NEUSTADT, P.C.



22850

Surinder Sachar
Registration No. 34,423

Marvin J. Spivak
SIGNATURE

Marvin J. Spivak

NAME

24,913

REGISTRATION NUMBER

DATE

Aug 31, 2000

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
BO OLSSON ET AL : ATTN: APPLICATION DIVISION
SERIAL NO: NEW U.S. PCT APPLICATION :
(Based on PCT/SE99/00198)
FILED: HEREWITH :
FOR: PROCEDURE TO TRANSMIT
INFORMATION AT TELEPHONE
ANSWERING SERVICE

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to a first examination on the merits, please amend the above-identified
application as follows:

IN THE CLAIMS

Please amend the claims as follows:

Claim 2, line 3, delete "(A-number)".

Claim 5, lines 1-2, replace "any of the previous patent claims" with --patent claim 1--.

Claim 7, lines 1-2, replace "any of the previous patent claims" with --patent claim 1--.

IN THE ABSTRACT

Page 10, line 3, replace "The invention relates to a" with --A--;

lines 6-7, replace "means of transmitting" with --transmits a--;
line 8, replace "invention" with --procedure--;
line 14, replace "invention" with --procedure--; same line, after
"makes" insert --it--;
line 17, replace "is" with --are--.

REMARKS

Favorable consideration of this application, as presently amended, is respectfully requested.

The present Preliminary Amendment is submitted to place the above-identified application in more proper format under United States practice. By the present Preliminary Amendment the claims have been amended to no longer recite any multiple dependencies. The abstract has also been amended to correct for minor grammatical and idiomatic informalities therein and to not recite any legal phraseology.

The present application is believed to be in condition for a full and thorough examination on the merits. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599
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TITLE OF THE INVENTION: PROCEDURE TO TRANSMIT INFORMATION
AT TELEPHONE ANSWERING SERVICE

Field of the invention

5 The present invention relates to a procedure to
transmit information at a telephone answering service,
especially in mobile telephone systems. The telephone
answering service, her called mobile answer, has a voice
mailbox for recording of speech and also possibility to
10 transmit text messages to the mobile telephone, especially
via SMS (Short Message Service). The invention makes
possible an improved functionality in the system in so far
as the text message is transmitted in parallel to the
mobile telephone from which listening to the voice mailbox
15 is made. The text message usually contains a telephone
number which can be connected with applications in the
mobile terminal. The invention makes possible that
telephone numbers, or personal messages, manually or
automatically, are stored in the mobile answering function
20 and are transmitted to the mobile terminal listened to.

Prior art

Within this technical field there are different
systems and solutions for mobile answering. It is, for
25 instance, known that a calling party himself/herself has
possibility to, by means of keyset on his/her telephone,
enter the information. Such information can be transmitted
via paging systems to the called part. The following
document can be regarded as representative for the prior
30 art:

EP,A2 662 763
WO,A1,95/12 948
WO,A2,97/31 498
WO,A1,97/01 252
35 WO,A1,96/09 714
EP,A2,783 219

WO, A1, 93/20 640

In the mobile answer of today, a user is routed to a mobile answer if the mobile subscriber is not accessible. There the A-subscriber will be met by a speech message, either the default voice, or one of two possible speech messages which the mobile subscriber has spoken for recording. In this state, the calling subscriber can speak a voice message to be recorded, which then can be listened to by the mobile subscriber. Mobile answer transmits a notification, via SMS to the mobile answer subscriber, which can contain A-number presentation of the calling subscribers. The mobile answer subscriber then can call the "dialled" numbers by opening the SMS-notification.

The problem is that one does not necessarily know to whom the telephone numbers belong, before one has listened to voice messages in mobile answer. The system is not quite easy to use. Further, the subscriber who is calling mobile answer can have information which is more suitable as text. For instance, a leader of a business who is calling may want to introduce himself/herself and give telefax and e-mailaddress, or a common subscriber may want to give another number than the A-number.

Therefore it would be an advantage to:

1. Have possibility to get A-number in connection with ones listening to the messages in audio response.
2. Have possibility to connect the telephone number to the mobile answer subscriber's own telephone list on the SIM-card.
3. Have possibility to packet the function, making it simple and intuitive to use.
4. Have the calling subscriber to give more information to mobile answer than just a voice message.

The present invention solves these problems by mobile answer storing information and transmitting this to the called subscriber only when he/she listens to his/her voice message. The information is transmitted in parallel, for

instance through SMS, and can be connected to applications in the called subscriber's mobile terminal, or on the SIM-card, for presentation and use. By that, the called subscriber will have the information presented at right
5 time and in a way which is easy to understand and use.

Summary of the invention

Consequently the present invention provides a procedure to transmit information in connection with
10 telephone answering service which is provided by a mobile answer device in a mobile telephone system.

According to the invention the calling subscriber is connected to the mobile answer device when the called subscriber cannot be accessed. The mobile answer device
15 stores information which originates from the called subscriber. When the called subscriber establishes a connection to the mobile answer device, to listen to - recorded voice messages, a message is transmitted in parallel to the called subscriber. This message contains
20 the stored information.

The stored information can, for instance, contain the called subscriber's number, one in advance stored message from the calling subscriber, or an optional number entered by the calling subscriber.

25 The invention is defined in enclosed patent claim 1, whereas advantageous embodiments of the invention are given in the subclaims.

Brief description of the drawing

30 The invention now will be described in detail with reference to enclosed drawing, the only figure of which is a diagrammatic illustration of the system according to the invention.

Detailed description of preferred embodiments

In the figure is shown diagrammatically a system which can realise the procedure according to the present invention. In the mobile telephone systems of today there are functions to record messages when a called subscriber cannot be accessed. The called subscriber can, for instance, have switched off the telephone, or be outside the coverage area of the system, or quite simply be busy in another call. A calling subscriber is then connected to a voice mailbox system, or the like, here called mobile answer. The calling subscriber can call from another mobile terminal, or an ordinary telephone in the fixed network. Certain functions according to the invention, however, implies a special functionality also in the calling subscriber's telephone, as is explained in more details below.

The mobile terminals of today often have an advanced functionality which can be stored on an active card, the so called SIM-card (Subscriber Identity Module). With WAP (Wireless Application Protocol) SIM Toolkit and JAVA in the mobile terminal, new possibilities are opened to create advanced services with good user interface.

The three first problems deal with presenting calling subscribers' A-numbers to the mobile answer subscriber who calls mobile answer.

1. The A-numbers are transmitted, not as previously at notification, but at the listening to the messages. This is done via SMS or USSD (Unstructured Supplementary Services Data) which uses signalling channels which transfer information in parallel with the speech service. The information is packeted to an application in the mobile terminal, which has access to telephone list and can present the information on the terminal's display. It is possible via SIM Toolkit or WAP.

2. The application connects the A-numbers to the telephone list in the mobile. I.e. if the one who is

calling is in the telephone list, the name is shown instead of the telephone number. If the number is not in the list, the number is shown as it is.

3. Via WAP or SIM Toolkit the information is shown, i.e. the names or telephone numbers of the different subscribers, automatically on the display as a menu (see example below).

"Call

- Kalle

10 - 08 689 5510 (this number does not exist in the telephone list)

- Sven Stålnacke

By selecting one of the menu options, and press the "call"-button, the call is established and the connection to mobile answer is disconnected. Menu selection can be made via a "cursor", or via selection of digits.

4. The fourth point deals with that the subscriber which ends up in mobile answer instead of only speaking a message for recording, is given the possibility to write further information via WAP, SIM Toolkit, or keyset code DTMF (Dual Tone Multi-Frequency). By using DTMF, information can be transferred also from an ordinary telephone.

DTMF: In order to use DTMF is required that an option is given by mobile answer. "Hallo, this is Lars Nilssons mobile answer box and I cannot answer just now. Please, speak a message for recording after the tone, and/or press "1" if you want to give a telephone number. At selection of "1" there comes: "Please, "dial" the number and finish by square(#)". The calling party consequently can speak a message for recording and then give a telephone number; thus not necessarily A-number, which often can be useful if one, for instance, is calling from a public call box, or from a PABX (Public Automatic Branch Exchange), where A-number is not presented.

WAP or SIM Toolkit: When the call is routed to mobile answer, the mobile answer immediately transmits a message to the calling subscriber's mobile terminal. If the mobile has the application, which can be located on the SIM-card or the in terminal, the mobile transmits one in advance stored personal message to mobile answer. The message can be stored in the terminal, or on the SIM-card, and can consist of telephone number and various text information. The mobile answer subscriber receives the message at the same time, at the listening to the mobile answer.

Consequently the present invention i.a. gives the following advantages:

- The telephone number from calling subscriber is transmitted to the voice mailbox subscriber via SMS or USSD, at the same time as the subscriber listens to recorded mobile answer messages. This can be performed by means of SIM Toolkit, or WAP-application, which is located in mobile answer and the mobile answer subscriber's terminal.
- The subscriber who is calling and ends up in mobile answer is given possibility to transmit an own telephone number, or a personal message, while he/she is speaking a speech message for recording in mobile answer. This can be performed via DTMF or (SIM Toolkit or WAP)-application on the SIM-card, or in the terminal.
- The solution is not limited to GSM, but can, if it is implemented via WAP, be used directly by all mobile standards which will be WAP-compatible.

The invention can be used, together with speech messages from mobile answer, also to transfer telephone numbers, or other information, from calling subscribers. The invention can be used to differentiate the service offer between different operators, and might be located on the SIM-card.

In present implementations of voice mailbox, information from calling subscriber only consists of

recorded voice messages together with A-number in the mobile answer notification.

- By the invention, the mobile answer subscriber can get the calling subscribers' numbers directly in connection with that the speech messages are listened to.
- Get the information presented with the name of the calling subscriber, via telephone book in terminal.
- The subscriber who ends up in mobile answer can give further telephone numbers or information.

10 An expert in the field realises that the invention can be implemented in different ways with different combinations of software and hardware. The extent of protection of the invention is only limited by the patent claims below.

PATENT CLAIMS

1. Procedure to transmit information in connection with telephone answering service which is provided by a mobile answer device in a mobile telephone system
5 c h a r a c t e r i s e d in the steps:

that a calling subscriber is connected to the mobile answer device when a called subscriber can not be accessed;

that the mobile answer device stores information which
10 originates from the calling subscriber;

that, when the called subscriber establishes a connection to the mobile answer device to listen to recorded speech messages, a message is transmitted in parallel to the called subscriber, which message contains
15 the stored information.

2. Procedure as claimed in patent claim 1,
c h a r a c t e r i s e d in that the stored information includes the calling subscriber's number (A-number), which is transferred automatically to the mobile answer device.

3. Procedure as claimed in patent claim 1,
20 c h a r a c t e r i s e d in that the stored information includes one at the calling subscriber in advance stored message which is transferred automatically to the mobile answer device.

4. Procedure as claimed in patent claim 1,
25 c h a r a c t e r i s e d in that the stored information contains an optional number, which is transferred by the calling subscriber to the mobile answer device.

5. Procedure as claimed in any of the previous
30 patent claims, c h a r a c t e r i s e d in that the message is connected to an application at the called subscriber's.

6. Procedure as claimed in patent claim 5,
c h a r a c t e r i s e d in that the application connects
35 a number with a telephone list.

7. Procedure as claimed in any of the previous patent claims, characterised in that the message is transmitted by means of a short text message service, for instance SMS (Short Message Service) or USSD (Unstructured Supplementary Services Data).

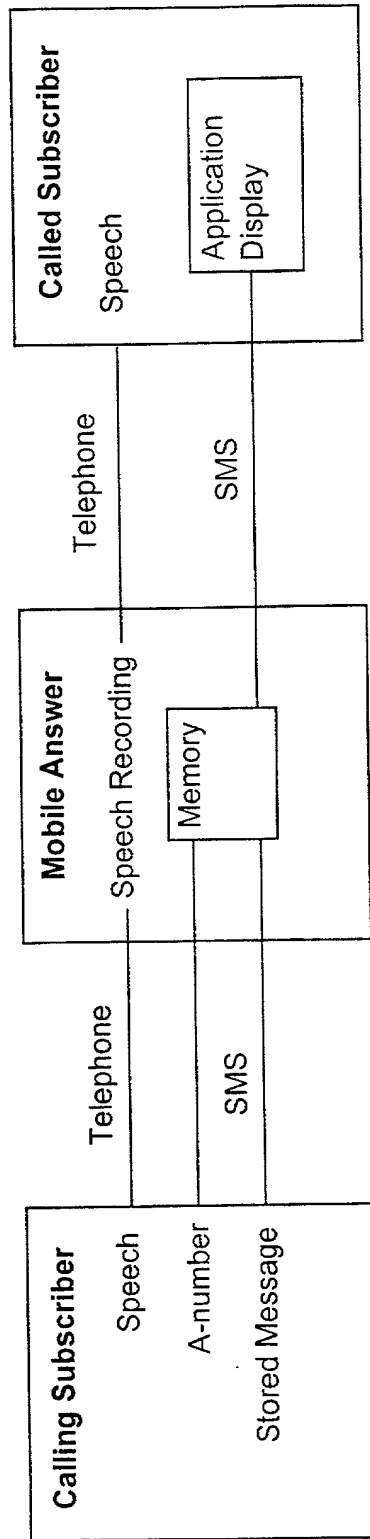


Figure 1

Declaration, Power Of Attorney and Petition

Page 1 of 3

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

PROCEDURE TO TRANSMIT INFORMATION AT TELEPHONE ANSWERING SERVICE

the specification of which

☐ is attached hereto.

☒ was filed on 21 August 2000 as

Application Serial No. _____

and amended on _____.

☒ was filed as PCT international application

Number PCT/SE99/00198

on 16 February 1999,

and was amended under PCT Article 19

on _____ (if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed
<u>9800483-1</u>	<u>SWEDEN</u>	<u>19 February 1998</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

We (I) hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

(Application Number)

(Filing Date)

(Application Number)

(Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.

Filing Date

Status (pending, patented,
abandoned)

PCT/SE99/00198

16 February 1999

And we (I) hereby appoint: Norman F. Oblon, Reg. No. 24,618; Marvin J. Spivak, Reg. No. 24,913; C. Irvin McClelland, Reg. No. 21,124; Gregory J. Maier, Reg. No. 25,599; Arthur I. Neustadt, Reg. No. 24,854; Richard D. Kelly, Reg. No. 27,757; James D. Hamilton, Reg. No. 28,421; Eckhard H. Kuesters, Reg. No. 28,870; Robert T. Pous, Reg. No. 29,099; Charles L. Gholz, Reg. No. 26,395; William E. Beaumont, Reg. No. 30,996; Jean-Paul Lavalleye, Reg. No. 31,451; Stephen G. Baxter, Reg. No. 32,884; Richard L. Treanor, Reg. No. 36,379; Steven P. Weihrouch, Reg. No. 32,829; John T. Goolkasian, Reg. No. 26,142; Richard L. Chinn, Reg. No. 34,305; Steven E. Lipman, Reg. No. 30,011; Carl E. Schlier, Reg. No. 34,426; James J. Kulbaski, Reg. No. 34,648; Richard A. Neifeld, Reg. No. 35,299; J. Derek Mason, Reg. No. 35,270; Surinder Sachar, Reg. No. 34,423; Christina M. Gadiano, Reg. No. 37,628; Jeffrey B. McIntyre, Reg. No. 36,867; William T. Enos, Reg. No. 33,128; Michael E. McCabe, Jr., Reg. No. 37,182; Bradley D. Lytle, Reg. No. 40,073; and Michael R. Casey, Reg. No. 40,294; our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to the firm of OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., whose Post Office Address is: Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Bo OLSSON

NAME OF FIRST ~~SOLE~~ INVENTOR

Residence: Krogtappan 188, S-136 53

Haninge, SWEDEN

SEX

Citizen of: SWEDEN

Post Office Address: same as above

Signature of Inventor

Date

10/10 - 2000

20 Mats Olof WINROTH
NAME OF SECOND JOINT INVENTOR

✓ Mats Olof Winroth
Signature of Inventor

✓ 29/9-00
Date

NAME OF THIRD JOINT INVENTOR

Signature of Inventor

Date

NAME OF FOURTH JOINT INVENTOR

Signature of Inventor

Date

NAME OF FIFTH JOINT INVENTOR

Signature of Inventor

Date

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Post Office Address: same as above

Residence: _____

Citizen of: _____

Post Office Address: _____

Residence: _____

Citizen of: _____

Post Office Address: _____

Residence: _____

Citizen of: _____

Post Office Address: _____